

## Siting Interstate Natural Gas Pipelines by Eugene B. Benson

### Overview

The siting of interstate natural gas pipelines is a corporate-made, profit-based decision, subject to review and prior approval by the Federal Energy Regulatory Commission (FERC). This article discusses FERC jurisdiction, the FERC review and approval process, eminent domain, federal preemption, and environmental justice considerations.

### FERC Jurisdiction

An interstate natural gas pipeline may not construct facilities, initiate a service, abandon facilities, or abandon a service without FERC prior approval. 15 USC 717-717z (the Natural Gas Act, or NGA). The NGA authorizes FERC to regulate the “transportation of natural gas in interstate commerce.” FERC reviews applications for the construction and operation of interstate natural gas pipelines under Section 7 of the NGA.<sup>1</sup>

FERC was established by legislation in 1977 as an independent agency within the Department of Energy and had transferred to it functions previously performed by the Federal Power Commission and Interstate Commerce Commission. Legislation gave it other powers in subsequent years. FERC has five commissioners, nominated by the President and confirmed by the Senate. The commissioners serve staggered five year terms. No more than three commissioners may be from the same political party. Each commissioner has one vote. The President appoints the FERC Chairperson. Similar to many other agencies, FERC has established its rules through a combination of regulations, orders, and adjudicatory decisions.

FERC jurisdiction does not extend to intrastate transportation, direct retail sales, or local distribution of natural gas. Those are subject to state regulation. FERC, however, has authority to regulate intrastate gas pipelines that operate in interstate commerce.

FERC jurisdiction over transport of natural gas in interstate commerce is limited to transport of natural gas by pipeline within the borders of the United States.<sup>2</sup> It has stated that it has authority to regulate: (1) pipelines that transport natural gas to or from the United States’ international borders; and (2) coastal liquefied natural gas (LNG) terminals that are accessible to ocean-going LNG tankers and connected to pipelines that deliver gas to or take gas away from the terminal. See, Emera CNG, LLC, 148 FERC ¶ 61,219 (2014).

Interstate gas pipelines include: 1) the large main transmission pipeline that transports gas in interstate commerce from a producing area to a market area, market hub or center, or local distribution company (LDC) or companies; 2) compressor stations; and 3) laterals. They may also include gas storage

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<sup>1</sup> This article discusses FERC authority as it relates to the siting of natural gas pipelines. It does not discuss FERC authority over other aspects of the transmission of natural gas, such as contracts or rates, or FERC authority over other types of energy.

<sup>2</sup> The Secretary of the Department of Energy has delegated to FERC the authority under Section 3 of the NGA to approve or disapprove applications for the siting, construction, and operation of facilities to import or export natural gas. Delegation Order No. 00-004-00A, effective May 16, 2006.



facilities and other appurtenances. Compressor stations, located along the transmission system, usually at intervals of forty to one hundred miles, increase the pressure and rate of flow of the gas to keep it moving through the pipeline. The basic components of a compressor station include compressor units, scrubbers/filters, cooling facilities, emergency shutdown systems, and an on-site computerized flow control and dispatch system that maintains the operational integrity of the station. They are fueled by a portion of the natural gas flowing through the station or by electricity. They usually occupy a multi-acre site and are rated at 1,000 horsepower or more. The size of a compressor station and number of compressor units depends on the size of the pipe and amount of gas to transmit. Larger compressor stations may have as many as 10-16 units with an overall rating of 50,000 to 80,000 horsepower and a throughput capacity of more than three billion cubic feet of natural gas per day. Laterals are pipelines (usually smaller than the main pipeline) that branch off from the main pipeline to connect with or serve one or more customers, most often LDCs. Most of the natural gas used by end users is delivered by LDCs. Compressor stations, laterals, and storage facilities require FERC approval as part of an interstate pipeline system even if the compressor station, lateral, or storage facility is wholly within one state.

Based on amendments to the NGA in 1978 (the Natural Gas Policy Act) and FERC Orders beginning in 1984, gas pipelines, while considered public utilities, are effectively common carriers and the sale of gas from a pipeline is market driven.

Pipeline safety is not the responsibility of FERC. Instead, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration sets safety standards for interstate gas pipelines and enforces those requirements. 49 USC Chapters 601 and 603 and 49 CFR Parts 190-199. FERC will require an applicant for a new pipeline to certify that the pipeline will comply with Department of Transportation safety standards.

#### FERC Review and Approval Process

FERC will approve an application to construct and operate an interstate gas pipeline by issuing a certificate of public convenience and necessity, as authorized by section 7 of the Natural Gas Act. 15 USC 717f.<sup>3</sup> FERC may include "reasonable terms and conditions" in any certificate it issues. The certificate will designate the route of the pipeline and the location of compressor stations and other pipeline facilities. See 18 CFR Part 157, Subpart A (FERC regulations on applications for certificates of public convenience and necessity).

FERC must issue a certificate of public convenience and necessity if it finds that a proposed pipeline or service "is or will be required by the present or future public convenience and necessity." FERC has said the "public convenience and necessity" standard is flexible and case specific. To determine public convenience and necessity for a pipeline, FERC will look at the reasonable expectation of customers, adequacy to serve the customers, ability to obtain adequate financing for the pipeline, whether costs of the project appear reasonable, and if initial rates are reasonable for customers and revenues for the pipeline. See, section 157.14 of FERC regulations. To help show that public convenience and necessity requires a new pipeline, a company proposing a pipeline will enter into contracts, usually with LDCs, for sale of the gas that would be transported by the proposed pipeline. FERC has not required

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<sup>3</sup> Pipelines in operation may receive a blanket facilities certificate to conduct daily operations (maintenance, installation of equipment, etc.).

that a new pipeline capacity be completely subscribed; it has issued certificates of public convenience and necessity for capacity subscribed as low as 60 percent and as low as 55 and 77 percent in the first and second years of the operation of a pipeline.

FERC's application review and certificate issuance process has three parts: 1) applicant planning process; 2) application process; and 3) construction process. As part of the planning process, an applicant will identify its preferred route for the pipeline, including the location of compressor stations. It will file Resource Reports with FERC that describe the project and among many aspects discuss the route and location, alternative routes and locations, and expected impacts. 18 CFR 380.12.

National Environmental Policy Act (NEPA) review of the proposal occurs during FERC review. FERC is the lead agency for NEPA review and thus is responsible for the preparation of the Environmental Assessment (EA) or Environmental Impact Statement (EIS), whichever it deems appropriate for the proposed project.

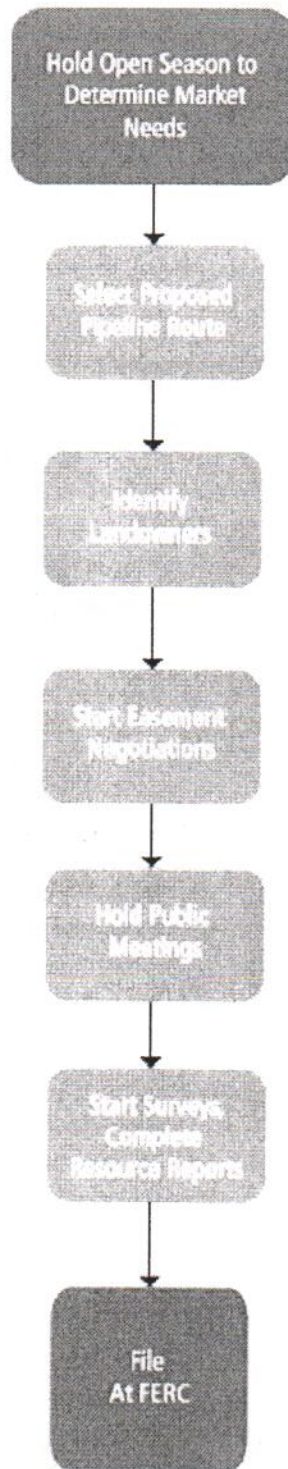
The proposed location of the pipeline (including compressor stations) might change during NEPA and FERC review.

FERC has provided this graphical display of the applicant planning process (<http://www.ferc.gov/resources/processes/flow/gas-1.asp>):

*(See next page)*

## PROCESSES FOR NATURAL GAS CERTIFICATES

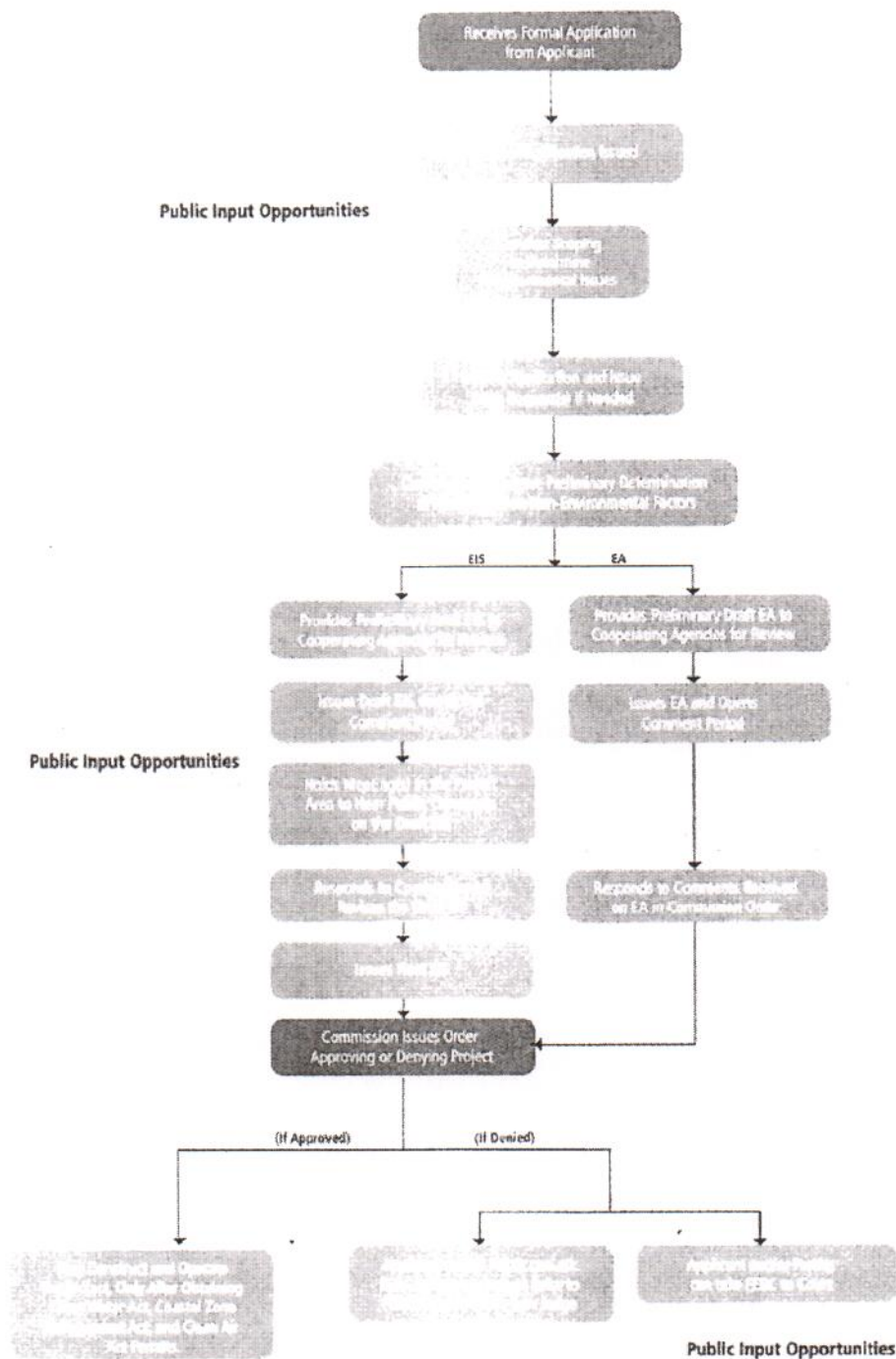
### Applicant's Planning Process





FERC has provided this graphical display of the application process (<http://www.ferc.gov/resources/processes/flow/gas-2.asp>):

## PROCESSES FOR NATURAL GAS CERTIFICATES



FERC has created a pre-filing process that it recommends to applicants and that overlaps with the applicant planning process. Most pipeline applicants use the pre-filing process. Pre-filing brings FERC into the planning and review process before a formal application is filed with FERC. The pre-filing procedures are described in section 157.21 of FERC regulations, which identifies various steps of the process, including initial consultation with FERC and content required in the prospective applicant's request to use the pre-filing process. Section 157.21 also lists some of the activities undertaken by FERC staff and the third-party contractor (if one is used) during the pre-filing period. National Environmental Policy Act review of the proposal begins during the pre-filing process and continues into the formal application process.

Before submitting a request to use the pre-filing process, a prospective applicant will meet with FERC staff to introduce the project to FERC and discuss the status of efforts to obtain the information required for the pre-filing request letter. FERC recommends that the prospective applicant bring to the meeting an initial draft of the pre-filing request letter. During the meeting, FERC staff will consider the regulatory path and NEPA document (EA or EIS) most appropriate for the project and whether a third-party contractor will be needed for NEPA review. Thereafter, a prospective applicant may file its pre-filing request letter with FERC and if approved by FERC, enter pre-filing and provide the materials and hold the meetings required by pre-filing.

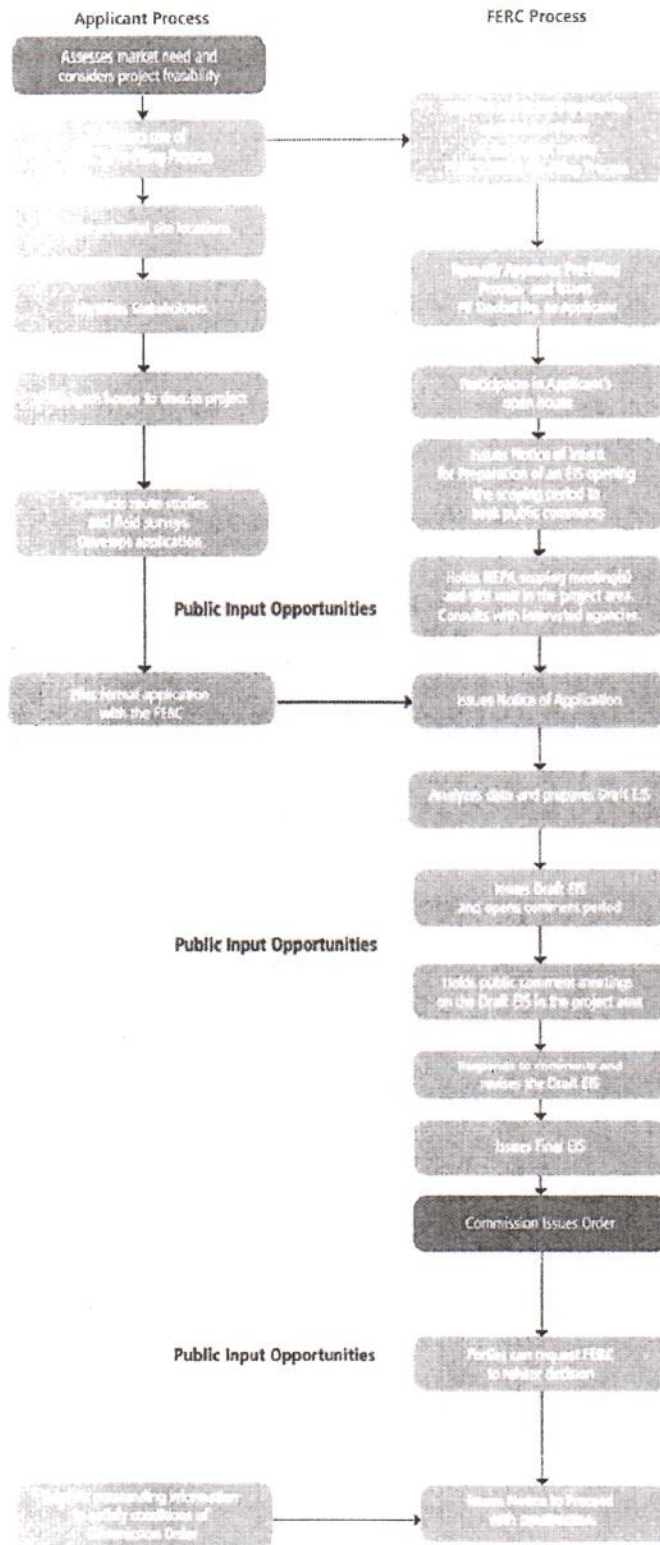
FERC has provided this graphical display of its review process when pre-filing is used and when it determines an EIS is required (<http://www.ferc.gov/resources/processes/flow/process-eis.asp>):<sup>4</sup>

*(See next page)*

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<sup>4</sup> The pre-filing process when FERC determines an EA is required is identical to when FERC determines an EIS is required except for the use of an EA rather than an EIS. Compare <http://www.ferc.gov/resources/processes/flow/process-ea.asp> to <http://www.ferc.gov/resources/processes/flow/process-eis.asp>

# EIS Pre-Filing Environmental Review Process





For a new pipeline, FERC may issue two orders: one for environmental issues and one for non-environmental issues such as whether the pipeline meets FERC policies and has adequately addressed landowner concerns. The environmental order will be issued after the NEPA process is concluded and will include conditions designed to meet environmental considerations identified in the NEPA.

Siting is considered during FERC and NEPA review. An EIS must rigorously explore and objectively assess the environmental impacts of a proposed pipeline, and all reasonable alternatives to it, including the no action alternative. 40 CFR 15.02.14. Such alternatives analysis is the "heart of the environmental impact statement." *Id.* It must be done in a comparative form to provide a clear choice among the alternatives and must include a discussion of direct effects and their significance; indirect effects and their significance; possible conflicts between the proposed action and the objectives of federal, state, regional, and local land use plans, policies, and controls for the area; the environmental effects of the alternatives and the proposed action; energy requirements and conservation potential of various alternatives and mitigation measures; natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures; historic and cultural resources; and the means to mitigate impacts. 40 CFR 1502.16.

FERC may require an applicant to consider changes in the location of the pipeline, compressor stations, and other pipeline facilities, and may require an impact analyses of those alternatives. Those changes may include small shifts in location and major changes in route. NEPA, however, does not mandate a specific outcome. FERC has indicated it balances the environmental impact of a project against its economic benefit but may determine not to choose the alternative with the least environmental impact. *E.g., Midcoast Interstate Transmission v. FERC*, 198 F.3d 960 (D.C. Cir. 2000). It has stated it will approve an application for a certificate only if the public benefits from the project outweigh any adverse effects. FERC Order Clarifying Statement of Policy, Docket No. PL99-3-001 (February 9, 2000).

#### Eminent Domain

The FERC certificate is more than simply approval of the application and siting of the pipeline and related facilities. Section 7(h) of the NGA authorizes a pipeline to initiate eminent domain proceedings if a pipeline needs a right of way and is unable to obtain one through negotiations. All issues of the pipeline route and environmental impacts are determined in the FERC proceeding. In an eminent domain proceeding the court will defer to the FERC order on location of the pipeline and environmental conditions. See *e.g., Kern River Gas Transmission Co. v. Clark County Nevada*, 757 F. Supp. 1110 (D. Nev. 1990); *Williams Natural Gas Co. v. City of Oklahoma City*, 890 F.2d 225 (10th Cir. 1989), cert denied, 497 U.S. 1003 (1990).

#### Federal Preemption

State and local zoning and other land use requirements that are inconsistent with a FERC certificate of public convenience and necessity or with the eminent domain authority provided for a gas pipeline are preempted by the Natural Gas Act. The United States Supreme Court, in *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300-01 (1988), held that Congress has occupied the field of matters relating to the transportation of natural gas in interstate commerce.

The NGA long has been recognized as a "comprehensive scheme of federal regulation of all wholesales of natural gas in interstate commerce." *Northern Natural Gas Co. v. State*



Corporation Comm'n of Kansas, 372 U.S. 84, 372 U. S. 91 (1963), quoting Phillips Petroleum Co. v. Wisconsin, 347 U.S. 672, 347 U.S. 682 (1954). [Footnote 6] The NGA confers upon FERC exclusive jurisdiction over the transportation and sale of natural gas in interstate commerce for resale. Northern Natural Gas Co., 372 U.S. at 372 U. S. 89.

*Schneidewind* concerned a state's regulation of securities issued by a pipeline company. The Court noted that FERC is not expressly authorized to regulate natural gas companies' issuance of securities, yet it nonetheless found preemption, reasoning that the NGA is a comprehensive scheme of federal regulation of all wholesales of natural gas in interstate commerce that gives FERC a number of tools, such as its authority to fix rates and to withhold certificates of public convenience and necessity, for examining and controlling the issuance of securities in the exercise of its comprehensive authority.

Since *Schneidewind* courts have regularly held that state and local requirements regarding siting, construction, extension, and operation of natural gas facilities in interstate commerce are preempted by the NGA. See, e.g., *Dominion Transmission v. Summers*, 723 F.3d 238 (D.C. Cir. 2013); *Northern Natural Gas Co. v. Iowa Utilities Bd.*, 377 F.3d 817 (8th Cir. 2004); *National Fuel Gas Supply Corp. v. Public Service Commission of the State of NY*, 894 F.2d 571 (2nd Cir 1990); *Islander E. Pipeline Co., L.L.C. v. Blumenthal*, 478 F. Supp. 2d 289, 295 (D. Conn. 2007). Preemption extends to state statutes limiting condemnation. See, e.g., *Tennessee Gas Pipeline Co. v. Massachusetts Bay Transportation Authority*, 2 F. Supp.2d 106 (D. Mass. 1995). The NGA has been held to preempt state constitutional provisions on condemnation as well. *Columbia Gas Transmission Corp. v. An Exclusive Natural Gas Storage Easement*, 747 F. Supp. 401 (N.D. Ohio 1990).<sup>5</sup>

Notwithstanding federal preemption, FERC often requires applicants to comply with state and local licensing and permitting requirements unless such requirements are inconsistent with their federal certification. It has required applicants to seek state approvals, subject to FERC review. Similarly, FERC often asks applicants to consider and analyze pipeline routes and locations that would eliminate or minimize takings and inconsistencies with state and local land use requirements. For a project in Massachusetts, one might anticipate FERC requiring an applicant or certificate holder to obtain the state legislative approval required for an easement on lands with protections under Article 97 of the Massachusetts Constitution.<sup>6</sup> Whether FERC will authorize a certificate holder to exercise eminent domain over Article 97 land without state legislative approval is as yet unknown.

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<sup>5</sup> The Natural Gas and Hazardous Materials Pipeline Safety Act, 49 U.S.C. 60101 - 60125, which authorizes the U.S. Department of Transportation to set and enforce safety standards for gas pipelines, preempts state and local pipeline safety requirements. Courts have found both express and implied preemption. E.g., *ANR Pipeline Co. v. Iowa State Commerce Commission*, 828 F.2d 465 (8th Cir. 1987).

<sup>6</sup> In 1972 Massachusetts added Article 97 to the Massachusetts Constitution, providing the people with "the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose." Article 97 authorizes the state to purchase conservation lands and easements to accomplish those purposes and requires the "Lands and easements taken or acquired for such purposes shall not be used for other purposes or otherwise disposed of except by laws enacted by a two thirds vote, taken by yeas and nays, of each branch of the general court." The state's Article 97 Land Disposition Policy is no net loss of Article 97 lands and that land be removed from Article 97 protection only in extraordinary circumstances. Land disposition includes a change in use, in addition to transfer or conveyance of the property, by deed, easement or lease.



Federal preemption does not apply to federal regulatory requirements unless specifically provided by statute. A pipeline's location may be moved to meet permitting requirements of the federal Clean Water Act, Endangered Species Act, Historic Preservation Act, or Clean Air Act, among other federal statutes. That would include instances when a state has delegated authority to implement a federal statute. E.g., *Dominion Transmission v. Summers*, 723 F.3d 238 (D.C. Cir. 2013). (Maryland is delegated to administer the federal Clean Air Act, which is not preempted by the NGA, and thus may apply the standards set forth in its federally approved state implementation plan. It may not apply state law that is preempted.) This author found no case law or guidance on whether state mandated watershed protections necessary to meet the requirements of the federal Safe Drinking Water Act are preempted by the NGA. Presumably they would not be preempted if a federal requirement.

Many parks and conservation lands in Massachusetts have been purchased with grants from the federal Land and Water Conservation Fund (LWCF). Those state assistance grants have supported hundreds of projects across Massachusetts' state and local parks, including trails, watershed lands, and scenic views. As of January 10, 2016, there have been 452 LWCF grants in Massachusetts for projects totaling 25,164.48 acres.<sup>7</sup> Those areas are likely protected from development under the federal program and should raise siting issues for a pipeline. Section 6(f)(3) of the LWCF Act provides that,

No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

#### Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order makes it the responsibility of each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

A Presidential Memorandum accompanying the order required that "each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by [NEPA]." On December 10, 1997, the Council on Environmental Quality (CEQ) issued guidance for agencies on how to address environmental justice under NEPA.

The NEPA Guidance sets forth principles for considering environmental justice in NEPA, including determining the composition of the population of the affected area and relevant public health data

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Easements required by a pipeline project for crossing Article 97 land would be a change in use requiring a two thirds vote in favor by both the Massachusetts Senate and Massachusetts House of Representatives.

<sup>7</sup> <http://waso-lwcf.nrcr.nps.gov/public/index.cfm> (accessed January 10, 2016).

concerning the potential for multiple or cumulative exposures to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards. The analysis of impacts, alternatives, and mitigation measures should take into consideration any high and adverse human health or environmental effect on a low income population, minority population, or Native American tribe that had been identified. The Guidance also calls for outreach to affected groups and meaningful community representation in the process.

It is unclear how environmental justice would affect a pipeline siting. NEPA Guidance authorizes the lead federal agency to take a hard look at impacts and at alternatives that would have fewer impacts on a low income population, a minority population, or a Native American tribe. That could result in a different location for all or part of a pipeline. Yet, NEPA Guidance does not require a decision based solely on environmental justice. This author could find no instance in which a FERC decision on a gas pipeline was determined by environmental justice considerations. A project that complies with regulatory requirements generally receives approval, notwithstanding environmental justice considerations.